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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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QUALCOMM, INC
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EXAMINER

JUNTIMA, NITTAYA

ART UNIT PAPER NUMBER

2663

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,473

Applicant(s)

SINNARAJAH ET AL.

Examiner

Nittaya Juntima

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 8-13, 18-22 and 25-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 14-16, 23, 24, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/8/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Response to Election/Restriction filed on 10/20/2005.
2. Claims 1-7, 14-17, 23-24, and 29-30 were elected without traverse, and claims 8-13, 18-22, and 25-28 were cancelled.

Specification

3. The disclosure is objected to because of the following informalities: on page 3, line 20, "6" should be changed to "5."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-5, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, line 2, the limitation "the mobile station" lacks antecedent basis.

Claim 15, line 1, the limitation "the mobile station" lacks antecedent basis.

Claim 16, lines 1-2, the limitation "the base station" lacks antecedent basis.

Claim 17, lines 1-2, the limitation "the base station," and

line 2, the limitation "the traffic channel" lack antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 6-7, 14, 23-24, and 29-30 are rejected under 35 U.S.C. 102(a) as being anticipated by the art of record, Watts et al. ("Watts") (EP 1 052 867 A1).

Regarding claims 1, 23, 29, and 30, Watts teaches a method for call set-up in a wireless communication system comprising:

Sending a channel assignment message (a request to establish the Bluetooth channel 30) from a first station (a local station 10 must include memory and a digital signal processing device in order to operate as the local station and communicate with the mobile station 26, Figs 1 and 3) to direct the use of previously negotiated service parameters (the channel properties previously negotiated) (the local station transmits a request to establish the channel using the channel properties previously negotiated to the mobile station 26 in step 76 in Fig. 3, paragraph 0041, see also paragraphs 0011-0013).

Regarding claims 2 and 24, since the structure or function of the claimed flag is not further defined, it reads on one of the fields included in the request to establish channel 30, paragraph 0041.

Regarding claims 3 and 14, because the structure or function of the claimed active set identifier associated with an active set and the active set's parameters is not further defined, therefore, since the channel assignment message (a request to establish the Bluetooth channel) of

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Watts includes the previously used active set information (previously negotiated channel properties) (paragraph 0041), the active set identifier reads on the values of the power level, the voice transmission quality, the data transmission rate, the error correction, collectively, as these values are associated with the negotiated properties of the channel (an active set) and the parameters of the properties of the channel (the active set's parameters). See paragraphs 0011-0013 and 0041.

Regarding claim 4, Watts teaches that the channel assignment message (a request to establish the Bluetooth channel sent to the mobile station in step 76) is sent in response to an origination message (not further defined, reads on the acknowledgement originated by the mobile station 26) from the mobile station (the mobile station 26). See Fig. 3, and paragraphs 0039 and 0041.

Regarding claim 6, Watts teaches that the channel assignment message (a request to establish the Bluetooth channel sent in step 76) is sent in response to a paging sequence (not further defined, reads on a call indication 68, the activation code to the mobile station in step 70, and the OK message from the mobile station in step 72. See Fig. 3, and paragraphs 0038-0039 and 0041.

Regarding claim 7, Watts teaches that the channel assignment message (a request to establish the Bluetooth channel) is sent to initiate a call without paging in response to a paging request message (not further defined, reads on a call indication 68 in Fig. 3 which must be received from an inherent MSC) from a MSC (paragraphs 0038-0039 and 0041).

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6-7, 14, 23-24, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (the Background section of the specification and Figs. 1-3) and the art of record, Watts et al. ("Watts") (EP 1 052 867 A1).

Regarding claims 1, 23, 29, and 30, the admitted prior art teaches sending a channel assignment message (step 5 in Figs. 1 and 2, step 30 in Fig. 3) from a first station (BS must include memory and a digital signal processing device in order to operate as the base station and communicate with the MS, Figs. 1-3) to a second station (MS, Figs. 1-3). See paragraphs 1011, 1019, and 1024.

However, the admitted prior art fails to explicitly teach that the channel assignment message directs the use of previously negotiated service parameters.

On the other hand, in a similar method for call setup in another wireless system, Watts teaches a channel assignment message (a request to establish the channel including the negotiated channel properties sent in step 76 of Fig. 3) directs the use of previously negotiated service parameters (the previously negotiated channel properties in steps 60, 60'). See paragraph 0041, and also 0011-0012.

Given the teaching of Watts, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of the admitted prior art to include the use of the use of previously negotiated service parameters in the channel assignment message such that

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the channel assignment message would direct the use of previously negotiated service parameters as recited in the claim. The suggestion/motivation to do so would have been to considerably reduce the response time from arrival of an incoming call to establishment of the communication link as taught by Watts (paragraph 0010).

Regarding claim 2, it is inherent that the channel assignment message (step 5 in Figs. 1 and 2, step 30 in Fig. 3) of the admitted prior art must include a flag (not defined, reads on one of the fields of the channel assignment message), see paragraph 1011.

Regarding claim 3, the admitted prior art teaches that the channel assignment message (step 5 in Figs. 1 and 2, step 30 in Fig. 3) includes the relevant information for all pilots in the active set of the mobile station (paragraph 1011), therefore, the claimed active set identifier whose structure is not further defined reads on the relevant information, collectively, for all pilots in the active set which are associated with an active set and the active set's parameters.

Regarding claim 4, the admitted prior art teaches that the channel assignment message (step 5 in Fig. 1) is sent in response to an origination message from a mobile station (step 1), see paragraphs 1017-1019.

Regarding claim 6, the admitted prior art teaches that the channel assignment message (step 5 in Fig. 2) is sent in response to a paging sequence (steps 21-23-2-4), see paragraphs 1006, 1009, and 1011.

Regarding claim 7, the admitted prior art teaches that the channel assignment message (step 30 in Fig. 3) is sent to initiate a call without paging in response to a paging request message (step 21) from a MSC, see paragraph 1024.

Regarding claim 14, the combined teaching of the admitted prior art and Watts fails to explicitly teach that the channel assignment message includes previously used active set information. However, it is well known that the active set would likely to remain the same over a short period of time while the mobile station remains in the same cell area and that the mobile station may originate multiple call setups within the short period of time. Therefore, it would have been obvious to one skilled in the art to modify the combined teaching of the admitted prior art and Watts to include that the channel assignment message includes previously used active set information to accommodate call setups between successive traffic channel operations over a short period of time.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Figs. 1-3) and the art of record, Watts et al. ("Watts") (EP 1 052 867 A1), and further in view of the art of record, LaDue (USPN 5,999,808).

Regarding claim 5, the combined teaching of the admitted prior art and Watts does not teach that the origination message includes short data burst information.

However, LaDue teaches an origination message (origination access packet) that includes short data burst information (not further defined, reads on non-dialed, automatically derived encoded and non-encoded application specific data information including data related to games, wages, rules, selected game protocols, and the like). See col. 3, lines 11-18 (see also col. 9, lines 53-55, col. 10, lines 21-22, and col. 12, lines 12-18).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined teaching of the admitted prior art and Watts to include the origination message that includes short data burst information as recited in the claim. The

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suggestion/motivation to do so would have been to transport application specific data including data related to games, wages, rules, etc in the four bit fields of the origination message as taught by LaDaue (col. 3, lines 11-18).

9. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Figs. 1-3) and the art of record, Watts et al. ("Watts") (EP 1 052 867 A1), and further in view of Willey (USPN 5,854,785).

Regarding claims 15 and 16, the combined teaching of the admitted prior art and Watts does not teach a mobile station responding to the channel assignment message with a pilot strength measurement message conditioned on the mobile station's reception of one or more additional pilot signals at a strength exceeding a threshold, and a base station sending an updated channel assignment message in response to the pilot strength measurement message.

However, Willey, as shown in Fig. 3, teaches a mobile station responding to a channel assignment message with a pilot strength measurement message (subsequent Access Channel Message which specifies more current pilot strength measurements and corresponding identities than those in the first Access Channel Message) conditioned on the mobile station's reception of one or more additional pilot signals at a strength exceeding a threshold (see col. 7, lines 2-7, and 37-65, see also col. 1, lines 51-53), and a base station (the allocated base station) sending an updated channel assignment message (subsequent Channel Assignment Message) in response to the pilot strength measurement message ("Upon receipt of subsequent Access Channel Messages, the same allocation and transmissions will occur," col. 7, lines 49-80, see also col. 7, lines 2-7, therefore, the new or updated Channel Assignment Message with more current pilot strength measurements and corresponding identities must be sent by the allocated base station).

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Given the teaching of Willey, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined teaching of the admitted prior art and Watts to include a mobile station responding to the channel assignment message with a pilot strength measurement message conditioned on the mobile station's reception of one or more additional pilot signals at a strength exceeding a threshold, and a base station sending an updated channel assignment message in response to the pilot strength measurement message as recited in the claim. The motivation/suggestion to do so would have been to improve the likelihood that the mobile station will receive and successfully demodulate the Channel Assignment Message or other messages as taught by Willey (col. 6, lines 34-39).

Allowable Subject Matter

10. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
January 5, 2006

NS



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER